

Work Order ID 137745

137745

Page 1

Wednesday, October 07, 2015 12:44:50 PM

Item ID: D3167-1 Accept *N900040100* Setup Start *NS1*

Revision ID: EC130 Stop *NS2*

Item Name: Bearpaw

Start Date: 10/07/15 Start Qty: 2.00 ** 6 SH Cust Item ID:

Required Date: 10/07/15 Req'd Qty: 2.00 ** 6 Customer:

Reference:

Approvals: Process Plan: MVS Date: OCT 09 2015 Tooling: Date:

QC: Date: SPC (Y/N): Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3167	Rev A1								

120 0.00

120

FLOW WATER JET

Waterjet

Memo

FLOW CNC Waterjet

Cut Blank as per File D3167-1 _BLANK

130

130

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

HAAS CNC vertical machine #1

Note: (2) Bearpaw for (1) Kit

1-Inspect material for defects or damage prior to machining

2-Machine as per Folio FA285 and Dwg D3167

3-Deburr

140

140

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

Quality Control

0.00

0.00

6 16/02/09

DAS 44 9-89 16/02/23

DAS 44 9-89 16/02/23

DQA:

Date: 16.03.01



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 16/02/05

Work Order update only ☐

Work Order: <u>137745</u> Part No. <u>D3167-1</u> NCR No. <u>16-5615</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☒</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☒	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Date: 16/2/23		Step #: 130		QTY Effective: 1		MRB (QSI042) Approval																																																																	
Description Work Order Deviation Overall thickness of hearpan is under tolerance by 0.004".				Disposition The margins of safety in SR-D130-700 Rev.A are large and 0.004" reduction in thickness will not cause the part to fail by inspection. Acceptable.																																																																			
				Completed By DAS 12 16/2/23 9-89		Lead hand / Supervisor Approval Verification DAS 14 16/02/24 9-89																																																																	
				QC / QA Coordinator Approval 38 FEB 24 2016																																																																			
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Work Order ID 137745

137745

Page 2

Wednesday, October 07, 2015 12:44:50 PM

Item ID: D3167-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bearpaw

Start Date: 10/07/15 Start Qty: 2.00

2

Cust Item ID:

Required Date: 10/07/15 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC8- Inspect parts - second check	0.00							DAS 14 9-29
150						6	0		16/02/24
QC	Memo	0.00							
Quality Control									
151	Identify as per dwg & Stock Location: <i>SH438A</i>	0.00							
151						6			DAS 6 9-29
Packaging	Memo	0.00							FEB 24 2016
Packaging									
190	QC21- Final Inspection - Work Order Release	0.00							
190									FEB 25 2016
QC	Memo	0.00							
Quality Control									

MS FEB 25 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
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Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

Wednesday, October 07, 2015 12:44:49 PM

Page 1

Work Order ID: 137745

137745

Parent Item: D3167-1

D3167-1

Parent Item Name: Bearpaw

Start Date: 10/07/15

Required Date: 10/07/15

Start Qty: 2.00

Required Qty: 2.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MUHMWB10

Purchased

No

120

sf

484.0000

3.6

7.2

MUHMWB10

02/16/02/09

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

Location

Loc Qty

Loc Code

MAT

84

m132063

84

MAT018

400

m133248

400

139171

26

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

DART AEROSPACE LTD		Work Order:	137745
Description: Bearpaw		Part Number:	D3167-1
Inspection Dwg: D3167 Rev: A1		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**

 ☐ **Prototype**

Inspection Sheet Drawing Dimension		Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.06 x 45°	+0.030/-0.010	.055x45°	/		Vern	FK-04
B	5.80	+/-0.030	5.793	/		"	"
C	0.25 x 45°	+/-0.030	.25 x45°	/		"	"
D	R0.25	+/-0.030	.25	/		R-G.	
E	0.200	+/-0.030	.198	/		Vern	FK-04
F	0.250	+/-0.010	.247	/		"	"
G	0.625	+/-0.030	.621	/		"	"
H	0.375	+/-0.010	.375	/		"	"
I	0.950	+0.030/-0.010	.952	/		"	"
J	3.21	+/-0.030	3.203	/		"	"
K	19.00	+/-0.030	19.00	/		Tape	FK-05
L	Ø0.260	+0.005/-0.000	.260	/		Vern	FK-04
M	Ø0.93	+/-0.030	.932	/		"	"
N	0.30	+0.030/-0.000	.312	/		"	"
O	0.375	+/-0.030	.382	/		"	"
P	7.23	+/-0.030	7.231	/		Vern	FK-08
Q	4.54	+/-0.010	4.54	/		"	"
R	2.00	+/-0.030	1.998	/		"	"
S	12.000	+/-0.010	12.00	/		Tape	FK-05
T	6.000	+/-0.010	6.00	/		"	"
U	23.75	+/-0.030	23.75	/		"	"

Measured by: DAS 44 2-59		Audited by: DAS 14 C-22		Prototype Approval:		N/A
Date: 16/02/23		Date: 16/02/24		Date:		N/A

Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D130-700-011	KJ/RF	

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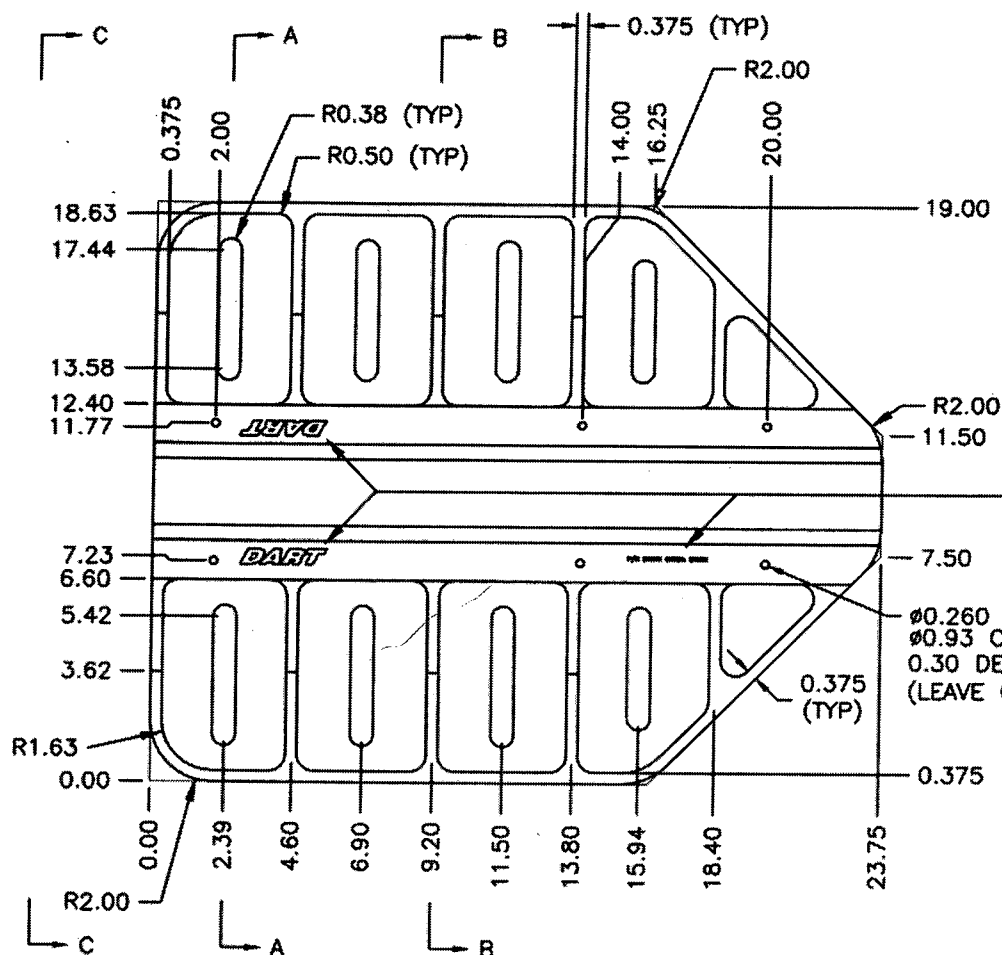
				DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.		REV. A	
		D3167		SHEET 1 OF 2	
DATE		TITLE		SCALE	
02.10.08		BEARPAW		1:5	
A	02.10.08	NEW ISSUE			
A1	02.12.17	5.80 WAS 5.50			

ENGRAVE LOGO TO MAX
DEPTH OF 0.012. ENGRAVE
PART AND BATCH NUMBERS
TO MAX DEPTH OF 0.010.
(TYPICAL LOCATION AS
ILLUSTRATED)

STOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

137745 ML3

15-10-09



D3167-1

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

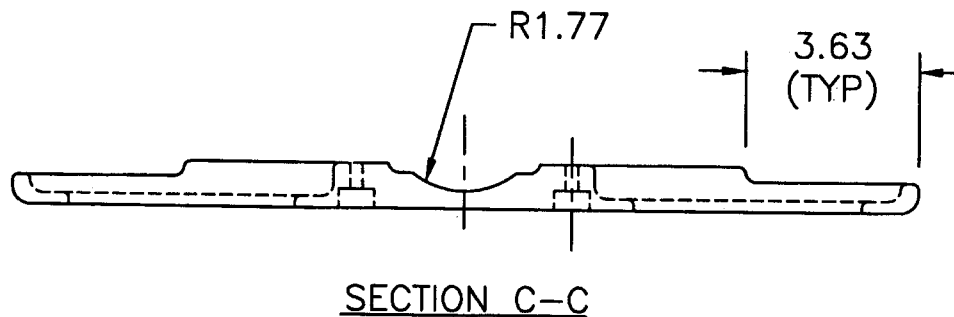
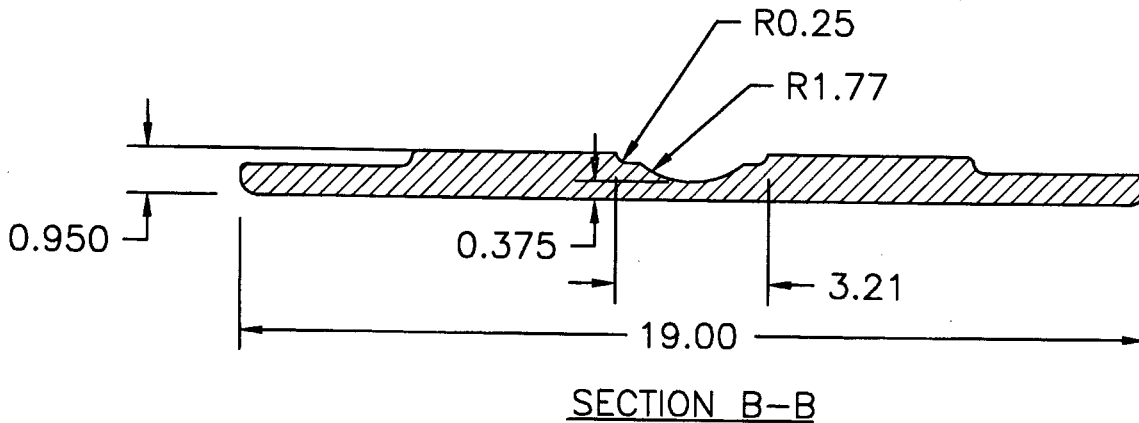
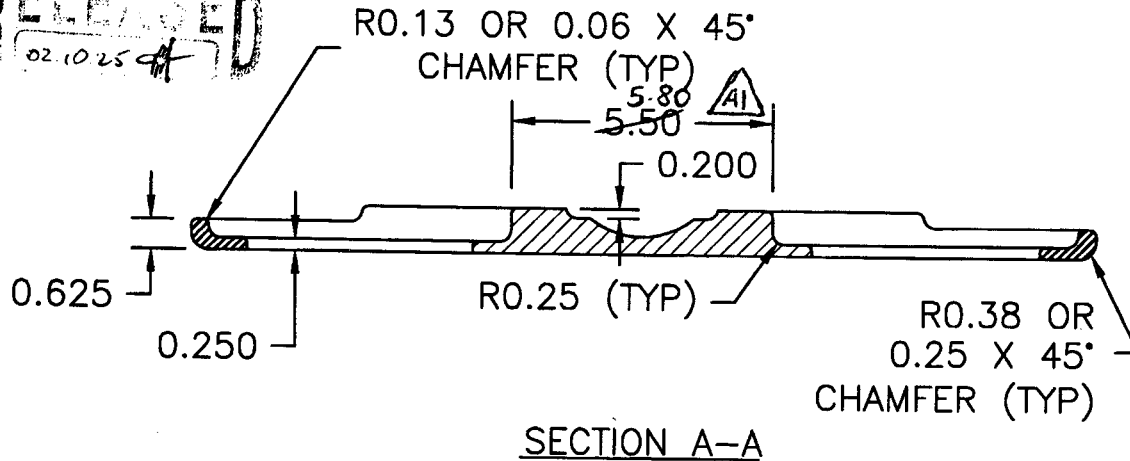
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DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3167	REV. A SHEET 2 OF 2
DATE 02.10.08		TITLE BEARPAW	SCALE 1:4

RELEASED
02.10.25 *[Signature]*



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